Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of Claims:</u>

1.   (Currently Amended) A three dimensional object creation system that prints objects layer by layer, the system including a plurality of printheads, the system printing at least part of each of multiple layers simultaneously,

> the system including semiconductor memory and

> wherein data defining at least one layer is stored in the semiconductor memory,

> the system is configured to enable at least one first printhead that is initially configured to print at least part of a first layer to be dynamically reconfigured to print at least part of a second layer, and

> if at least one printhead initially configured to print the second layer fails whilst printing said second layer, said at least one first printhead is dynamically reconfigured to complete the printing of at least part of said second layer.

2.   (Original) The system of claim 1 wherein data defining all of the layers is stored in the semiconductor memory.

3.   (Original) The system of claim 1 wherein each printhead includes at least some of the semiconductor memory.

4.   (Original) The system of claim 1 wherein the semiconductor memory of each printhead stores data relating to at least the part of the layer printed by the printhead.

5.   (Original) The system of claim 1 wherein the semiconductor memory of each printhead stores data relating to at least part of at least another layer.

6.   (Original) The system of claim 1 wherein the semiconductor memory of each printhead stores data relating to at least part of the previous layer compared to the layer currently being printed by the respective printhead.

7.   (Currently Amended) The system of claim 1 including data links between ~~layer groups~~<u>printheads</u>.

8.   (Currently Amended) The system of claim 1 including ~~more than~~about 10 Gbytes of semiconductor memory.

9. – 10. (Cancelled).

11.   (Original) A system as claimed in claim 1 wherein the printheads are configured to enable printing of at least two different materials in at least one layer.

12.   (Currently Amended) A system as claimed in ~~claim 1~~claim 11 wherein the printheads are configured such that at least one of the layers may be printed with a first set of materials and at least one other of the layers may be printed with a second set of materials, and

          wherein the first and second sets are not the same.

13. - 16. (Cancelled).

17.   (Currently Amended) A system as claimed in ~~claim 1~~claim 11 including a least two printheads, a first one of the printheads printing a first material and a second one of the printheads printing a second material, the first material being cured by a first method and the second material being cured by a second method and wherein the first and second methods are different.

18.   (Original) A system as claimed in claim 1 including at least one printhead for printing material to create a printed product, and

          an object incorporation device that incorporates inorganic semiconductors into the product being printed whilst the at least one printhead prints the product.

19.   (Original) A system as claimed in claim 1 including at least one object incorporation device that incorporates non-printed objects into partially completed product, the non-printed objects not being printed by the system.

20.   (Original) A system as claimed in claim 1 including an object incorporation device
that inserts at least one non-printed object into at least one cavity created during the printing
process, the object incorporation device incorporating the at least one non-printed object
into the at least one cavity during the printing of the respective printed object.

21.   (Original) A system as claimed in claim 1 including at least one printhead that prints
electrical connections to at least one object incorporated in the products.